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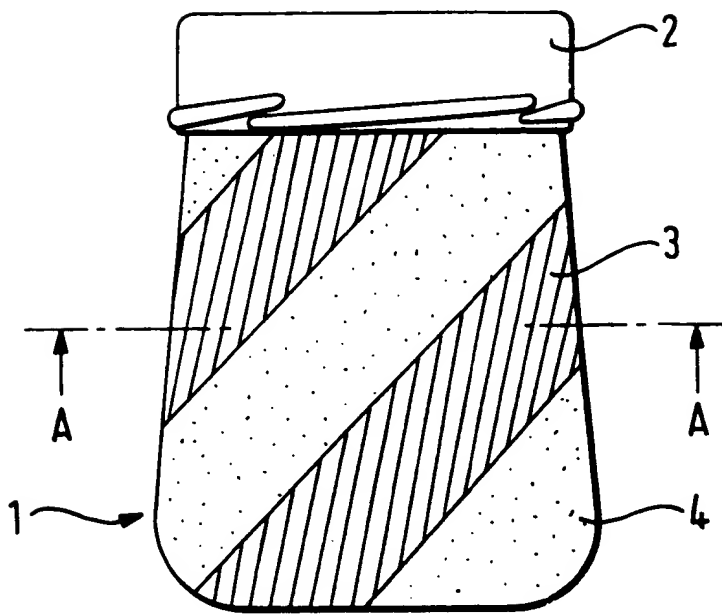


FIG. 1

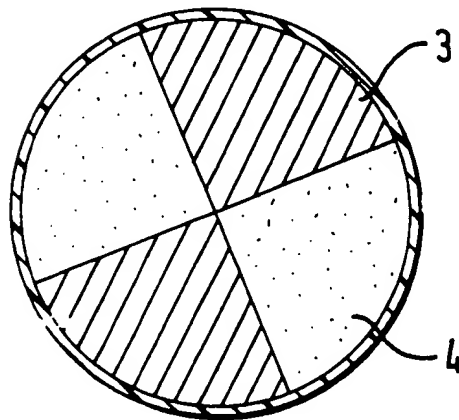


FIG. 2

- 1 -

**AUSTRALIA**

PATENTS ACT 1990

**COMPLETE SPECIFICATION**

FOR A STANDARD PATENT

**ORIGINAL**

Name of Applicant: SOCIETE DES PRODUITS NESTLE S.A.

Actual Inventors: Brigitte HILLEBRAND and Hans Uwe TRUECK

Address of Service: SHELSTON WATERS  
60 MARGARET STREET  
SYDNEY NSW 2000

Invention Title: "COMBINATION COMPRISING A PASTY FOOD AND  
A PACKAGE"

The following statement is a full description of this invention, including the best method of performing it known to us:-

Combination comprising a pasty food and a package

The invention relates to a combination comprising a pasty food and a symmetrical package which contains a food having at least two components and which contains in  
5 each case one of these components alternating along the axis of symmetry.

French Patent No. 2248023 already relates to a package of this type having two different components, which comprises a fatty phase and an aqueous phase.  
10 However, this patent is restricted to the cosmetics sector. A gelation process of the product is utilized in the package with the aid of a mould piece to be removed subsequently.

The object underlying the invention is to have a  
15 combination available which contains a food having at least two components separately. Storage trials have shown that all products filled as two or more phases have a flavour advantage in comparison to mixed versions having an identical formula. In product combinations of  
20 this type, however, special adaptations of the formula are necessary. For example, possible migration processes can be prevented by exchanging oil-soluble colorants for water-soluble colorants.

The invention relates to a combination for pasty  
25 foods according to the preamble of Claim 1, the components having a Bostwick viscosity between 40 and 60 mm.

Bostwick viscosity is taken to mean the measurement of the flow path of a product in the course of 30 seconds at 20°C. This measurement is carried out with an  
30 instrument from Kinematica AG (Littau, Switzerland).

Pasty foods are taken to mean those foods which fall into the abovementioned viscosity range. Preferably, a combination of mayonnaise and a seasoning phase is used.

35 The symmetrical package is either a glass package or a plastic package, for example made of poly(ethylene terephthalate) or a tube package.

According to the invention, the number of the

components is not critical: at least two components are employed. Preferably, two components are available: for example, more likely, an oily and an aqueous phase. The combination mayonnaise with a seasoning phase is particularly preferred.

In order to achieve an optimal phase separation, a certain viscosity of the two phases must be achieved. Studies have shown that at too low a viscosity the phases run into one another and thus mix. If the viscosity is too high, air inclusions between the phases occur and the phases do not lie smoothly on one another. On the other hand, the miscibility of the two phases is problematic in the application, i.e. the phases may be stirred together only with difficulty. Furthermore, it has been found that the filling operation is likewise highly dependent on the viscosity.

As already mentioned above, the product texture and the optimum filling operation are achieved when the two components have a Bostwick viscosity between 40 and 60 mm. In the case of a combination mayonnaise/seasoning phase, a Bostwick viscosity of 40-50 mm is selected for the two phases.

The two components are filled in different types of shapes, such as spiral, in layers or vertically next to one another. Preference is given to spiral filling, in order to increase the optical attractiveness. However, this type of filling is not critical: many variations are possible. If layers are filled, the conditions are the same as mentioned above, i.e. the Bostwick viscosity of the two phases is between 40 mm and 60 mm.

The number of zones of the two components is likewise not critical: three or more zones each may be employed. Preferably, there are two, three or four zones for each component.

As far as the composition is concerned, the mayonnaise contains between 10 and 80% of oil and the seasoning phase between 0 and 70% of oil, between 4 and 50% of water and between 0.2 and 6% of starch.

The seasoning phase comprises a base of vegetable

puree, fruit puree and other seasoning constituents, such as mustard in ground form or in the form of grains. The seasoning phase can also contain pieces, both vegetables and fruits, the size of the pieces being between 1 and 4 mm. The foodstuff comprises 20-80% mayonnaise and 80-20% seasoning phase, and is preferably made up of a approximately 50% of mayonnaise and approximately 50% of the seasoning phase.

The two-phase products are generally rated fresher, less acidic and more aromatic in comparison to a product filled in a mixed state.

The ingredients for the seasoning phase are mixed, pasteurized and recooled. These steps are necessary in order to ensure the microbiological safety and resistance to spoilage of the products. In addition, a heating step is necessary in order to gelatinize the modified starch.

As far as the mayonnaise is concerned, it is prepared in a conventional manner. The pH of the two components is in the acidic range, i.e. between 2.8 and 5.

The combinations of the invention can be stored without refrigeration for at least 12 months.

The two-phase products developed are packaged in jars by means of a coextrusion feeder which is equipped with piston valves. The products are filled in different types of shapes via a plurality of rotating nozzles with simultaneous lowering of the jar. This will be implemented industrially by means of longitudinally running feed belts and fillers connected in parallel.

The invention is now described in more detail in association with the drawings, where

Fig. 1 shows a diagrammatic representation of the package and

Fig. 2 shows a section along line A-A of Fig. 1.

The package (1) has a screwed-on lid (2) and

contains a product having two components (3) and (4). These components are filled in a spiral shape through an angle of 300°. The seasoning phase (3) comprises a base of tomatoes/squash and the mayonnaise (4) contains 50% oil.

The invention is now described in more detail in association with the examples, the ratio mayonnaise/seasoning phase being 50/50.

#### Example

##### 10 A. Mayonnaise

A mayonnaise is used having the following composition (%)

|                        |      |
|------------------------|------|
| Oil content            | 50   |
| Egg yolk content       | 1.5  |
| Seasoning constituents | 3    |
| Vinegar content 11%    | 4    |
| Salt content           | 2    |
| Starch content         | 2.2  |
| Sugar content          | 9.2  |
| Water content          | 28.1 |

The mayonnaise has a Bostwick viscosity of 50 mm.

##### B. Seasoning phase.

For the seasoning phase, 5 variants are listed which have a consistency like the mayonnaise phase used.

For all of these examples, the Bostwick viscosity was set to 40-50 mm. The contents are all in %.

| Constituents               | Mexicana | Tomato/<br>squash | Green<br>sauce | Mustard      | Exotica               |
|----------------------------|----------|-------------------|----------------|--------------|-----------------------|
| Vegetable puree            | 12       | 18                | 5              | 28 (mustard) | 25 (fruit<br>content) |
| Vegetable pieces/<br>herbs | 17       | 35.1              | 15.6           | 0            | 0                     |
| 5 Fat content              | 15       | 0                 | 20             | 15.0         | 0                     |
| Starch content             | 3.6      | 2.6               | 3.5            | 0.2          | 4                     |
| Sugar content              | 12       | 12                | 8.5            | 6            | 21                    |
| Vinegar content<br>11%     | 4.8      | 7.5               | 4.6            | 9.0          | 5.5                   |
| 10 Salt content            | 3.8      | 2.2               | 2.8            | 3.5          | 0.4                   |
| Flavouring<br>constituents | 2        | 0.1               | 6              | 0.2          | 0.5                   |
| Water content              | 29.8     | 22.5              | 34             | 38.1         | 43.6                  |

Each of these components is then filled together  
15 with the mayonnaise at 50-50 on a hygienic line.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

1. Combination comprising a pasty food and a symmetrical package which contains a food having at least two components and which contains in each case one of these components alternating along the axis of symmetry, characterized in that these components have a Bostwick viscosity between 40 and 60 mm.
2. Combination according to Claim 1, characterized in that one component is mayonnaise and the second component is a seasoning phase.
3. Combination according to Claim 1 or 2, characterized in that the combination is filled in a spiral shape.
4. Combination according to Claims 1 to 3, characterized in that each component is present in two zones.
5. Combination according to Claims 2 to 4, characterized in that the oil content of the mayonnaise is between 10 and 80%.
6. Combination according to Claims 2 to 5, characterized in that it is made up of approximately 20-80% of mayonnaise and approximately 80-20% of seasoning phase.
7. Combination according to Claims 2 to 6, characterized in that the oil content and the water content of the seasoning phase are between 0 and 70% and 4 and 50%, respectively.
8. Combination according to Claim 7, characterized in that the seasoning phase contains vegetable puree or fruit puree, portions in piece form or other seasoning constituents.
9. Combination according to Claims 2 to 8, characterized in that the mayonnaise and seasoning phase have a Bostwick viscosity between 40 and 50 mm.
10. Combination according to Claims 2 to 8, characterized in that the seasoning phase contains between 0.2 and 6% of starch.
11. Combination according to Claims 1 to 10, characterized in that the symmetrical package is a glass package or a tube package.
12. Combination comprising a pasty food and a symmet-

rical package which contains a food having at least two components, these components being in layers, characterized in that these components have a Bostwick viscosity between 40 and 60 mm.

- 5 13. A combination comprising a pasty food and a symmetrical package, substantially as herein described with reference to the Example or any one of the accompanying drawings.

DATED this 19th Day of April, 1996  
SOCIETE DES PRODUITS NESTLE S.A.

Attorney: RUTH M. CLARKSON  
Fellow Institute of Patent Attorneys of Australia  
of SHELSTON WARRICK

# **ABSTRACT**

The invention relates to a combination of food and symmetrical package (1), the package containing a food having at least two components (3), (4), containing in each case one of these components alternating along the axis of symmetry and these

5 components having a Bostwick viscosity between 40 and 60 mm.



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**(12) PATENT ABSTRACT      (11) Document No. AU-A-50797/96**  
**(19) AUSTRALIAN PATENT OFFICE**

- (54) Title  
**COMBINATION COMPRISING A PASTY FOOD AND A PACKAGE**
- (51)<sup>6</sup> International Patent Classification(s)  
**A23L 001/24      A23L 001/221**
- (21) Application No. : **50797/96**      (22) Application Date : **19.04.96**
- (30) Priority Data
- (31) Number      (32) Date      (33) Country  
**95201024      21.04.96      EP EUROPEAN PATENT OFFICE (EPO)**
- (43) Publication Date : **31.10.96**
- (71) Applicant(s)  
**SOCIETE DES PRODUITS NESTLE S.A.**
- (72) Inventor(s)  
**BRIGITTE HILLEBRAND; HANS UWE TRUECK**
- (74) Attorney or Agent  
**SHELSTON WATERS, Level 21, 60 Margaret Street, SYDNEY NSW 2000**
- (57)

Bostwick viscosity is taken to mean the measurement of the flow path of a product in the course of 30 seconds at 20°C. This measurement is carried out with an instrument from Kinematica AG (Littau, Switzerland).

Pasty foods are taken to mean those foods which fall into the abovementioned viscosity range. Preferably, a combination of mayonnaise and a seasoning phase is used.

The symmetrical package is either a glass package or a plastic package, for example made of poly(ethylene terephthalate) or a tube package.

**CLAIM**

1. Combination comprising a pasty food and a symmetrical package which contains a food having at least two components and which contains in each case one of these components alternating along the axis of symmetry, characterized in that these components have a Bostwick viscosity between 40 and 60 mm.

(11) 50797/96

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12. Combination comprising a pasty food and a symmetrical package which contains a food having at least two components, these components being in layers, characterized in that these components have a Bostwick viscosity between 40 and 60 mm.

NO 5330/002/EXT

CONVENTION - COMPANY - NON-PCT  
(By Assignment & Applicant is Applicant in Basic Appln)

P/00/0086  
Section 29 (1)  
Regulation 3.1(2)

AUSTRALIA

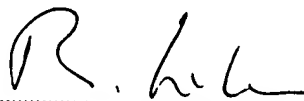
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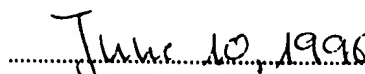
## NOTICE OF ENTITLEMENT

We, SOCIETE DES PRODUITS NESTLE S.A., of 1800 Vevey, Switzerland, being the applicant and nominated person in respect of Application No. 50797/96, state the following:-

1. The person nominated for the grant of the patent has entitlement from the actual inventors by assignment.
2. The person nominated for the grant of the patent is the applicant of the basic application listed on the patent request form.
3. The basic application listed on the patent request form is the first application made in a Convention country in respect of the invention.

For and on behalf of  
SOCIETE DES PRODUITS NESTLE S.A.

  
.....  
(Signature)

  
.....  
(Date)

Name: ..... Roman L. VUILLE .....

Title: ..... Vice President .....

File: 18726

SHELSTON WATERS  
60 MARGARET STREET, SYDNEY, AUSTRALIA

## AUSTRALIA

PATENTS ACT 1990

### PATENT REQUEST: STANDARD PATENT

We, SOCIETE DES PRODUITS NESTLE S.A., a Swiss Body Corporate, being the person identified below as the Applicant, request the grant of a patent to the person identified below as the Nominated Person, for an invention described in the accompanying standard complete specification.

Full application details follow:

Applicant: SOCIETE DES PRODUITS NESTLE S.A.  
Address: 1800 Vevey, Switzerland  
Nominated Person: As above  
Address: As above  
Invention Title: "COMBINATION COMPRISING A PASTY FOOD AND A PACKAGE"  
Names of actual Inventors: Brigitte HILLEBRAND and Hans Uwe TRUECK

#### BASIC CONVENTION APPLICATION DETAILS

Application Number: 95201024.7  
Country: European Patent Office (Designating Switzerland)  
Country Code: EP  
Date of Application: 21st April, 1995

Drawing number recommended to accompany the abstract: Figure 1

Address for service is: SHELSTON WATERS  
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Attorney Code: SW

DATED this 19th Day of April, 1996.  
SOCIETE DES PRODUITS NESTLE S.A.

by *P. H. Clarkson*

*P. H. Clarkson*  
Solicitor for the Applicant

To: The Commissioner of Patents  
WODEN ACT 2606

File: 18726  
Fee: \$280.00

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